

What is energy?

Lesson Review

Answer the following questions in **complete sentences**.

1. What is potential energy? _____
2. When a baseball player is holding a bat, what kind of energy does the bat have? _____

3. When a baseball player is swinging a bat, what kind of energy does the bat have? _____
4. Two people of the same mass are running a 5-k race. One person is running at a pace of 15 km/h, while the other is running at a pace of 12 km/h. Which runner has more kinetic energy? Why?

5. Two people are walking to school at a rate of 5 km/h. One person weighs 600 newtons, and the other weighs 555 newtons. Which person has more kinetic energy? Why? _____

6. What two factors determine an object's gravitational potential energy? _____

7. A 50-kg stone and a 70-kg stone are raised to the same height above the ground. Which has more gravitational potential energy? Why? _____

Skill Challenge

Each of the following items has potential energy or kinetic energy. Write *PE* for potential energy or *KE* for kinetic energy in the space provided.

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| _____ 1. water falling over a dam | _____ 6. racing sailboat |
| _____ 2. water in a cup | _____ 7. running dog |
| _____ 3. park bench | _____ 8. falling raindrop |
| _____ 4. moving car | _____ 9. parked car |
| _____ 5. rock on the ground | _____ 10. rolling ball |